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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/371,983	08/11/1999	NIGEL J R KING	476-1827	9883

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EXAMINER	
WAXMAN, ANDREW	

ART UNIT	PAPER NUMBER
2667	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/371,983	Applicant(s) KING, NIGEL J R
	Examiner Andrew M Waxman	Art Unit 2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds the limit of one paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11, 12, 17-21, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardner et al. (US Patent No. 5,857,147), hereinafter referred to as Gardner.

1. Regarding claims 11 and 20, Gardner discloses a system and method including a base station (2) capable of communicating with user station (4) by way of fixed rate channels. The base station includes means (vocoder) for coding data at a plurality of different data rates (see col. 6 lines 40-43), and capacity management module (rate control logic) for monitoring the amount of data traffic at the base station (see col. 5 lines 51-54). Gardner further discloses the ability to reduce the data rate if the amount of data traffic at the base station exceeds a predetermined level (see col. 5-6 lines 65-9 and col. 8 lines 11-24). See also Block Diagram Figure 5.

Regarding claims 12 and 21, Gardner further discloses coding the data channel in a progressive manner dependent on available bandwidth. See col. 6 lines 6-16.

Regarding claims 17 and 25, Gardner further discloses a system for controlling transmission rates in the uplink (forward) and downlink (reverse) directions specifying a plurality of rates for which the vocoder can encode the data (see col. 6 lines 40-44) thereby allowing equal transmission rates in both directions.

Regarding claim 18, Gardner discloses an embodiment of the invention directed to speech transmission (see col. 1-2 lines 64-7), fixed rate channels being voice band channels is inherent to Gardner.

Regarding claims 19 and 26, Gardner further discloses the system being a fixed wireless access system, i.e. plurality of user stations (4) communicating via an integrated base station (2) using wireless media. See FIG. 2.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Hsu et al. (US Patent No. 6,314,112) hereinafter referred to as Hsu.

Regarding claim 13, Gardner discloses all of the limitations as recited above with respect to claim 12.

Gardner does not disclose a bit rate of 32 kbps in each of the two channels and the coding scheme for the channel comprising a bit rate of up to one of 64, 32, 16, and 8 kbps.

Hsu discloses an apparatus for transmission capacity enhancement including two fixed rate channels of 32 kbps, where the coding is one of 8 kbps-64 kbps. See col. 6 lines 4-10.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to include the two fixed rate channels with the aforementioned coding rates, as disclosed by Hsu, in the invention as disclosed by Gardner.

One of ordinary skill in the art would have been motivated to do this to increase the network transmission capacity and to allow for compatibility for the invention with widely used existing T1 and E1 interfaces and network elements.

Claims 14-16, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner in view of Luddy (US Patent No. 5,953,346).

Regarding claims 14, 15, 22, and 23, Gardner discloses all of the limitations as recited above with respect to claim 11.

Gardner does not disclose on detection of a tone, switching the variable data rate channel to a variable data rate channel having a maximum bit rate dependant upon what portion of the fixed channels are allocated.

Luddy discloses a system including upon detection of a calling (data) tone initiating a switch from 32 Kb/s ADPCM to 64 Kb/s PCM which is implemented by the base station. Since the switch is implemented by the base station it is inherent to Luddy that this must be communicated to the base station. See col 4 lines 26-41.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to include the switch between 32Kb/s and 64Kb/s upon tone detection, as disclosed by Luddy, into the invention as disclosed by Gardner.

One of ordinary skill in the art would be motivated to do this in order to provide for high speed data transmission (see Luddy col. 4 lines 34-35) and to provide seemless compatibility with all PSTN voiceband modems.

Regarding claims 16 and 24, Gardner in view of Luddy discloses all of the limiations as recited above with respect to claims 14 and 22. Gardner further discloses checking the available bandwidth of the channels and if there is not sufficient bandwidth providing a variable bit rate channel and coding scheme having a permissible data rate. See col. 5 line 65 – col. 6 line 8.

Gardner in view of Luddy does not disclose the permissible data rate being the highest permissible data rate.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to provide the highest permissible data rate in the invention as disclosed by Gardner in view of Luddy.

One of ordinary skill in the art would have been motivated to do this in order to provide the most efficient and fastest transmission possible, thereby making the invention faster and more efficient.

Response to Arguments

Applicant's arguments with respect to claims 11-26 have been considered but are moot.

In response to applicant's arguments that Gardner relates to a "soft" capacity system, while the present invention can be said to be a "hard" capacity system, therefore is not applicable, the examiner respectfully contends that the present invention aims at reducing the probability of call blockage in a transmission system. Both "hard" and "soft" capacity limit

systems require the same steps for increasing the available channels within the transmission system. The examiner therefore contends that it is irrelevant whether the Gardner reference relates to a "hard" or "soft" capacity limit system because the Gardner reference teaches the limitations as claimed in the present invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Burg discloses a multiplexing system and method for integrating voice and data transmission on network.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M Waxman whose telephone number is (703) 305-8086. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Andrew M. Waxman
June 23, 2003

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
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